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ABSTRACT

Differences in spoken and written English appear at every level of the language; there are differences in phonology, morphology, vocabulary, and syntax, as well as differences in acceptability levels. This study contains four sections and an inventory of contrasting forms. Section One deals with domains and modalities including those discourse functions more appropriate to spoken or to written English, formality and register, cohesion and coherence, and topic change. The second section discusses properties, that is, communication channels and feedback, precision and economy, ellipsis, digression, and redundancy. Section Three examines phonology, typography, and punctuation. This discussion involves information units, the segmentation of words and sentences, typography and emotions, the syllable, and the influence of writing on speech. The final section analyzes vocabulary, including type and token differences, abbreviations, typography and spelling, and the matter of homophones and homographs. The inventory of forms provides a guide contrasting specific forms as they are realized in writing and speech. A glossary and a bibliography are also provided. (Author/AMH)

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ORAL AND WRITTEN COMMUNICATION:

AN ANALYSIS OF FORMS AND FUNCTIONS

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The contrast between spoken and written English plays a critical part in many areas of language use and language learning: with one's first language--in basic writing, children's and adult reading, technical and business communication; or with second language learning--in designing dialogs, choosing and designing materials for speaking classes,helping students develop their reading abilities and writing style.

In all these areas and more, a definitive study on the differences between spoken and written English will (1) help people represent both these modes more successfully in print, (2) help the writer develop his style by incorporating certain features of the spoken language, and (3) aid the teacher and materials developer in better using the resources of one modality for understanding the other.

Differences in spoken and written English appear at every level of the language: phonology and morphology, vocabulary and syntax. Some linguists argue for the two modes as separate dialects, with their own rules and conventions (Allen 1970:348). Others stress the grammatical differences, within an overall similarity (Gleason 1965:109). Until recently, the purists have done a great deal of mischief in condemning informal speech--even educated informal speech--as a model for writing. This attitude has suffered from the rise of discourse analysis/ discourse grammars; and in language teaching from the recognition of the notional-functional syllabus.

There are differences, hidden and obvious; such things for example as acceptability levels: We tend to be far less critical

of faults in speech than in writing. Of course, we aren't used to seeing conversation in unedited written form. The transcripts are often embarrassing; with their digressions. incomplete syntax, and heavy repetition. But this is the point: these are significant elements of speech, and must be reckoned with.

This study contains four sections and an inventory of contrasting forms. Section One deals with DOMAINS AND MODALITIES, including: those discourse functions more appropriate to spoken or to written English (elaboration/details, e.g., are more characteristic of written language); formality and register, cohesion and coherence, and topic change. Section Two discusses PROPERTIES: such matters as communication channels and feedback; precision and economy, ellipsis, digression; redundanny. Section Three examines PHONOLOGY, TYPOGRAPHY, AND PUNCTUATION: information units, the segmentation of words and sentences; typography and emotions; the syllable, and the infleunce of writing on speech. Section Four analyzes VOCABULARY: type/token differences; abbreviations, typography and spelling, and the matter of homophones and homographs ("It's a lovely relationship. Why altar it?"). Section Five--the INVENTORY OF FORMS--provides a guide contasting specific forms as they are realized in writing and speech.

DOMAINS AND MODALITIES

Conditions and Audience

Speech and writing situations seldom overlap. This fact alone would select different features for the two modes. Writing, as the psychologist Vygotsky expresses it, is speech without an interlocutor

addressed to an absent or imaginary person, or to no one in particular (1962:98-99). The sense of audience provides another critical difference between the modes, a difference dominated by rhetorical considerations, which in turn create grammatical and lexical contrasts. Speech has far less concern for the sense of audience; face-to-face interaction provides immediate feedback, that allows a speaker to change his presuppositions in mid-sentence. On the other hand, except for notes and letters, writing is usually addressed to more than one person; and an audience, apart from the scholarly reader, tends to have a wider range of backgrounds. Thus presupposition (information we assume on the reader's part) becomes far more important for successful writing. We can see the implications for vocabulary: In speech, if you don't know the meaning of a word, you can ask. The reader needs greater support in the text. What the writer lacks in one-way communication is the feeling of empathy that springs up when people meet and talk. Written language must find ways to compensate for this, and really good writing does, even fairly technical writing.

Other differences as well come from the sender-receiver relationship. A good reader can process 300-600 words per minute, while speech is transmitted at about 150 (Norman 1969:41). The rate, of course, is set by the speaker not the listener, who reaches a frustration level far more quickly than the reader. However, the speech situation usually allows for questions and other interactions. The writer must anticipate the rough spots and explain things in greater detail. Speaking and listening are reciprocal; reading and writing are not.

Style

The two media, print and speech, have developed preferences for different kinds of messages. You can feel the pull in trying to write a paper for both purposes. Print, in Spencer's words:

> may seek to entertain or beguile or seduce or impress the reader, to fill his leisure or empty his pockets, to provide him with knowledge vital to his education or information necessary to his work interests.

Broadly speaking, the chief ends of written language are: to entertain, to persuade, or to inform (Spencer 1969:8).

Speech is more immediate: in relaying the message, in obtaining feedback. Urgency is a property of speech; crucial reactions are seldom made in writing (Vachek 1959:11). The main function of spoken language is not to inform but rather for social and emotional exchange, Malinowsky's phatic communion.

Writing may have begun as an aid to memory. As a speech or story grew more elaborate, so there developed the need for detailed notes. Thus writing became a medium for elaboration (Bolinger 1975:479). Shaughnessy sums it up well (1977:32):

> Writing begins, in a sense, where speech leaves off--with organizing, expanding and making more explicit the stuff of dialog, so that the thought ...generated in speech can be given full and independent form.

There is a limit to the complexity we can hold in the mind at one time. The speed of transmission would quickly overwhelm the listener in a highly detailed oral presentation. The only way to compensate is a level of redundancy totally unacceptable in writing. You find this in forensic or deliberative speeches, that contain a great amount of overstatement and repetition (Connors 1979:289),

Grammatically, elaboration of details finds written expression in different and more varied modifying structures--clauses and phrases (see the Inventory). In addition, writing is characterized by nominal style: expressing ideas in noun phrases or nominal form, compared to speech, which is associated with verbal style (condensing ideas into verbs)(Wells 1960:213-221). For instance:

1A. The analysis involves a comparison between two sets of data.

B. The analysis compares two sets of data.

2A. The focus of this paper is on changes in the labor force.

B. This paper focuses on changes in the labor force.

O'Donnell's study turned up an average of 94.06 nominal constructions in writing per 100 T-units, compared to 74.69 in speech (T-unit = a clause and and all its modifiers)(O'Donnell 1974).

Certain language functions use different forms, depending on whether they are spoken or written. Definitions for instance. Written definitions usually contain fixed properties, including a term, class word, and limiting features (A tiger is a large striped cat found only in Asia). Such properties are considered too formal in conversational situations, where we find less apparent definition markers:

1. you know: "There's a great diversion (the speaker means diversity) in this class. You know, it's heterogeneous."
2. meaning: A: People live and learn.
   B: You like to think so; learning meaning profiting from things you do right and don't do right.
3. be + when: "Fatigue is when you're too tired to do anything."

"Coasting is when you're able to move without using any energy." (an infelicitous form).

4. Restatement: Tchr: What's a licking?

Child: He would get spanked.

For a detailed analysis of definitions and their properties, see my 1982 paper (forthcoming).

Thought and Form, Cohesion and Coherence, Register

Conversation seems to focus more on thought, writing on form (French 1930:291; Krashen 1978:174). The reason may be inherent in the two modes or a result of our education system. In the early grades, grammar is emphasized in the writing class; speech lessons concentrate on what is said and the physical movement used in saying it (Harrell 1957:38). Even in colleges, writing courses stress form, while speech communication deals chiefly with the meaning of the message.

This lesser concern with formal relationships may help account for a more frequent and abrupt topic change in spoken English. I would like to examine transition and topic change within the framework of cohesion and coherence; defining cohesion as the overt lexical markers that relate sentences or parts of sentences to each other (for example: sentence connectors, subordinators, ellipsis, pronoun references); coherence relates utterances through the situation, with no overt lexical markers. Written language is usually cohesive and coherent; speech may be coherent but not strongly cohesive (Widdowson 1978:27). Take the following:

1A: Could you drop these off at the cleaners?

B: I'm late for work.

A: Never mind.

2A: Could you drop these off at the cleaners?

B: I can't (ellipsis). I'm late for work.

A: Never mind. I'll do it myself.

The first dialog is coherent but not cohesive. The second is both, containing the underlined cohesive features, which characterize a written attempt at dialog, more than dialog itself.

One of the main cohesive devices--sentence connectors--is used with less precision in speech than in writing. The most common cohesive word in informal spoken narrative is and (Kroll, in Keenan 1977:95)., which occurs much less frequently in writing. Children sometimes seem to link together an endless chain of sentences, all of them joined by ands. Similarly, the word so. Take the following:

> I was in the park and I cut my leg climbing on a tree and it started to bleed so I went to Megan's house, but her mother wasn't there and I was gettin' scared cause the blood was comin' out and it started getting dark...

Clause connection in general is far simpler in speech, which often favors coherence: relating utterances by context instead of word links (the first dialog). Writing, on the other hand, selects a greater range of forms. Common relational terms in writing, like nevertheless, therefore, and in addition, rarely occur in informal speech, even among people who may use them regularly in writing (Gleason 1965:359).

At this point, it is worth refining our categories. Along certain dimensions, we can oppose the spoken-written distinction with the concept of planned and unplanned discourse. Planned discourse is organized in advance, completely written out. Unplanned is spontaneous, with at most a few notes or ideas, but with no

premeditated grammatical forms to clothe the thoughts. Both speech and writing may be planned, and if so, share features of a formal nature lacking in unplanned conversation (Keenan 1977:6).

Abercrombie uses the term spoken prose to designate formal speeches or lectures--presentations memorized or read aloud, either way copied from a written text. The greatest difference between spoken prose and normal conversation, he suggests, is at the phonetic level. Halfway between spoken prose and conversation is monolog: spontaneous spoken language, not previously prepared, and used in situations where others may be present but not meant to join in. (speeches, radio commentaries, sporting events many lectures) (Abercrombie 1965:2,7). Most spoken language involves unplanned informal conversation; this is the meaning I will attribute to the word speech unless otherwise indicated.

Unplanned and semi-planned discourse contains words from more than one register (level of formality). In a semi-planned situation such as a lecture, the speaker often goes from consultative (semi-formal) to casual register and back. Speech allows for a shift of register to accomodate people entering and leaving the speech situation. Another reason for this modulation is developing rapport with an individual or audience. As Crystal and Davy put it: "The person who maintains a facade of linguistic formality (in conversation) rapidly becomes a bore" (1975:87). Writing, by contrast, tends to maintain the same register. Different words expressing similar meanings produce varying degrees of formality, for instance: one-syllable words of Anglo-Saxon origin--such as get, take, bring--have a wider range of meanings than acquire or

obtain ("I went to the Embassy to get/obtain your visa." Or "I got/received your letter yesterdat."). The broader the range of meaning, suggests Ohashi, the less formal the word (1978:10-11). We tend to use the longer-syllable words in writing, the shorter-syllable words in speech. Some further examples: rapid/quick, difficult/hard, frequent/often. The following chart summarizes the terms discussed in the last few pages:

	COHERENCE	COHESION	PLANNED	UNPLANNED	REGISTER
SPEECH SPOKEN PROSE	X	X	X		CONSTANT
MONOLOG	X	(X)		X	VARIES
CONVERSATION	X			X	VARIES
WRITING	X	X	X		CONSTANT

Recall, Decoding

The two modes seem to function differently in perception and memory. Simpler material is best communicated by speech; complex ideas, with their numerous details and modifiers, are better grasped in writing (Carver, in Cantrill 1935:171). Levels of formality may affect remembering: In one study,a group was read information (planned discourse). A second group--given the same information in conversational style--retained 39% more of the material (Hollingsworth 1935:59-60).

While listeners have more distortions in recalling material, they produce fewer omissions and are less likely than readers to forget significant items. Work by Horowitz and his associates found that with simple material, crossing modalities yielded fewer perfect units in recall, i.e., readers who spoke had lower scores than readers who wrote. Listeners who wrote had lower scores than listeners who spoke. Their results suggest the desirability of examining students orally for lecture material and in writing for printed material (Horowitz 1968).

Syntactically, it is probably advantageous introducing the more elaborate grammatical patterns in writing; while semantic material--unless very detailed--may be better grasped by an initial oral presentation (Camutaliova, in Fried 1972:169; Lundsteen 1971:50).

Influence of Speech on Writing

Speech and writing influence each other strongly but in different ways. As Bolinger pointed out (1975:468), blind children learn to speak easily enough, but deaf children have enormous problems learning to read.

In many but not all ways, writing depends on speech. Consider these two phrases:

a special book

an SPSS program

In both cases the indefinite article is followed by a word beginning with s. But with the abbreviation SPSS, it is the pronunciation, not the spelling, that selects the an form of the article. Several

studies have indicated that children learn more efficiently from reading materials containing syntax closer to oral language (Ruddell 1965:273; Glazer and Morrow 1978:202).

However, learning does not transfer automatically across modalities, as mentioned in the Horowitz study. Similarly, with results from the Army Language School program of World War Two (Clark 1972:18). Accordingly it takes detailed and careful planning to apply these skills from one medium to another. Carolyn Gilboa teaching remedial English chiefly to Blacks in New York City found essays shaped from a wealth of oral tradition. Her students used proverbs, formulaic expressions, capitalization for emphasis. Her observations are worth quoting. As she explained, here were

> people to whom a composition meant a speech or sermon, not an essay written down on paper. These students had heard a lot of fundamentalist preaching, but they had not read much literature. What had seemed simply wrong in the the cadences of their own writing began to make sense when compared with those, say, of Martin Luther King's 'I Have a Dream' speech... you start with what they have, which is not simply a bunch of mistakes, but an oral tradition.
>
> (Time. Sept. 9,1979, p.11)

We find the influence of speech on writing at the morpheme level, with words like divine/divinity, reduce/ reduction, nation/ national, sign/signature, where phonetic change is not even represented by different letters (Shuy 1977:72).

Speech is constantly chipping away at the older writing conventions, for example, in the sphere of uniformity. Take the case of certain "irregular" plurals: oxen, syllabi, curricula.

In colloquial speech these are considered too formal, and it is this formality that pushes people toward regularizing them to oxes, syllabuses, curriculums.

From a distance, print not speech would seem a far better medium for communicating language. It is standardized/less subject to variation, stable, repeatable, its signals far clearer than the sounds of speech (Kavanagh 1968: 121-124). Yet, apart from rather complex material, it is less effective than speech, which contains face-to-face interaction with its varied communication channels, feedback, and other properties. This next section will compare certain properties of the spoken and written language.

PROPERTIES

Communication Channels and Feedback

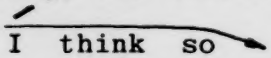
There are five basic communication channels for transmitting information:

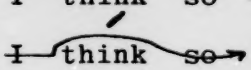
1. Nonverbal graphics
2. Knowledge of the world (presupposition)
3. Linguistic or vocal
4. Situation/context
5. Gesture

The first, in its use of pictures, compensates in part for the lack of context and gesture. Presupposition, as we have seen, is easier to establish in speech, since the listener's response provides immediate feedback. Situation--the when and where of the discourse--is totally lacking in writing.

Linguistically, the greatest difference between speech and writing is the availability of prosodic features: silence, stress, pitch , intonation. Talk contains long stretches of silence that often go unnoticed, as they may be filled by gesture and physical activities of the situation. Communication continues but not in verbal form.

Word stress changes the meaning of sentence pairs that are otherwise identical. The same with sentence contours. Take the following, for instance:

1. 

2. 

Sentence #1 is affirmative, stressing personal opinion: "I'm not sure how the others feel, but my opinion is yes, of course." Sentence #2 expresses uncertainty: "It's probably true but I have my doubts." A main function of prosody is expressing this modal sense, the speaker's attitude toward what he is saying (obligation, certainty). In speech, it is handled largely by word stress, in writing by a wider range of modal devices (verbs and otherwise) than are needed in speech (Allen and Corder 1974:165). In writing, for example, it is hard to achieve emphasis through modal verbs, as they seldom appear in a position of primary stress. Where the sentence "He can" achieves the effect, another like "He can go" requires additional typographic supports (an exclamation point, can in italics). Or more likely it would be rewritten as: "There's no doubt that he can go." Or "He can definitely go." The influence of prosodic features on meaning will be examined more fully in Section Four, on Phonology.

One of the most significant and dynamic communication channels is gesture, which tends to supersede the verbal message. When words and gestures conflict, we usually believe the look--the facial expression, the body movement. In the same way, it is easier to understand a person if you can see his face while he is speaking. The tone may change if he turns away to take care of something. The voice may go louder or clearer, more like radio or telephone speech, that must be more explicit than face-to-face interaction (G. Brown 1977:53). Gesture may be optional or obligatory in its relation to the spoken message. For example, in the sentence "Put it on the table" (assuming there's only one table in question) words will suffice (gesture optional). The sentence "Put it there" must be accompanied by some kind of physical gesture--nodding the head, pointing the finger (obligatory). Anyone who has tried writing dialog for a play or story realizes the problems in transforming gesture to print.

As a final topic of this part, I would like to consider feedback: features of a medium that allow the sender or by extension the receiver to clarify meaning, to know if the message is understood. Feedback in writing is restricted to items like an index, a table of contents, a summary (indicated by summarizing words: In short, In conclusion), things Joseph Vachek calls elements of surveyability (1959:11). To compensate for the limited feedback available, business and technical writing depend on limiters and clarifiers: words and phrases that specify or introduce the point to be discussed, such expressions as: With regard to your letter of...,Concerning the Adams case..., On the matter of...(Allen and Corder 1974:166).

In face-to-face interaction, the listener may provide feedback with words--Yes, No. Right. Yea. Ok--gesture, or nonlinguistic sounds: Mhm (yes). M'm (No).

Precision and Economy, Ellipsis and Digression

Speech has certain linguistic economies, in its use of ellipsis, gesture, and context, for transmitting information. The speaker often pronounces only as much of a word as he thinks necessary. The listener simply reconstructs missing parts of the message from his knowledge of the situation (for instance /jiyt/ "Did you eat?"). We delete subjects, verbs, and other parts of speech. Informal conversation often omits unstressed words, especially at the beginning of a sentence: Got any change? Didn't find it? Can't do it now. Another strategy: A speaker may leave a sentence unfinished if he assumes the listener knows the ending. Or the listener may add a completer:

A: You can use the ditto master..

B: ...as many times as you like.

A person who uses only full sentences in speech would be considered forced, artificial. In fact it is those less confident about their language who use more well-formed sentences (Shaughnessy 1977:17). In practice, the sentence as traditionally defined is really a unit of prose, not of conversation. That well-known master of form Rudolph Flesch, recommends using verbless sentences as a way of improving one's written style (1974:114).

Speech contains may false starts--anacoluthon (beginning a new construction without finishing an old one--switching stylistic tracks.

Two examples:

> We can use... we can do this kind of thing with pencil and paper.

The two source sentences are:

1. We can use pencil and paper for this kind of thing.
2. We can do this kind of thing with pencil and paper.

> A gene is simply defined, I'll get this thing out of your way, is simply a series of bases that are bonded together.

The two input models for this are:

1. The gene is simply defined as a series of bases...
2. The gene is simply a series of bases...

The second example illustrates another feature lacking in writing--an aside: a reference to some item outside the immediate sentence topic, in this case an overhead projector blocking the students' view of the board. Speech and thought are closer than writing and thought. Thus there is less chance to edit speech, which accounts for the presence of false starts in speaking and their absence in finished writing.

Written language allows time to edit what we want to say and reduces the amount of repetition in the message, leading to a certain economy. Writing also displays greater precision in its choice of words, compared to spoken language, that sometimes avoids being too precise by using terms like: You know what I mean, something, like that, or something; thingamajig, whatsizname (Crystal and Davy 1975:33,112), and so forth. We find greater imprecision in the collocations of spoken language (the appropriateness of words yoked together). The three basic types of collocation

restrictions are: by meaning, by semantic features, and by convention: (1) Meaning based: governed by logic or knowledge of the physical world. There are no purple cows; (2) Semantic features: "The palm tree passed away" (only animate things pass away); (3) Convention: governed by customary usage, for example, a pride of lions, a brace of pheasants. Occasionally, the incredible language computer in the brain turns left instead of right and we hear (referring to one sheet from a pile of dittoed pages handed out): "I'm sorry, this is empty," instead of the appropriate word blank. Or: "He doesn't beat around in circles." Either a false start or wrong collocation by convention: reader's choice.

Speech is given more to sidetracking or digression. This often happens when someone offers an illustration or detail of a point, then drops the main point itself or neglects it for a long time. The speaker was talking about going back to examine earlier newspaper reports:

> How many people who talk about Nixon, for example, would go back {I saw at least ten columns describing Nixon describing Nixon's mental state in terms of Macbeth. You know, he was sitting in his palace listening to the witches and (you know who the witches were...)}

The first digression appears within braces. The second, a digression within a digression, is marked by parentheses. With its limited communication channels, writing tends toward far greater explicitness than speech. There is less it can take for granted, fewer ways of filling in gaps in the linguistic message.

In an intriguing speculation, the Russian psychologist Vygotsky contrasts the three modes of: inner speech (thought), outer speech

(conversation), and writing. The "syntax" of inner speech, he urges, is the very opposite of writing, with conversation somewhere in between. Inner speech is condensed, abbreviated, elliptical almost beyond recognition; writing, developed, elaborate. Inner speech is almost entirely predicative, as the situation--the subject of thought--is always known to the thinker. Writing, on the other hand, must explain the situation fully. The change from highly compact inner speech to highly detailed writing requires a major grammatical and semantic expansion (1962: 45,100).

Redundancy

Redundancy in a speaker is a virtue, in a writer a vice (Ochs 1979:7). The truth of this rests partly on the kind of spoken discourse involved. In monolog (a lecture for example where there is no feedback from the listener), Everything must be clear from the delivery. If not, the message is lost. For this reason the speaker must reintroduce key ideas and concepts in subtle and appealing ways. "The writer cannot help his case by repeating his thesis again and again" (Connors 1979:288). The topic is stated, the arguments and details presented, then on to the next piece of business.

In general we can say that writing has the greatest redundancy in its syntax: the grammar of written English is more predictable, with few false starts and incomplete sentences, while monolog features heavy semantic redundancy. Conversation, on the other hand, requires less linguistic and semantic redundancy, as it can draw heavily on the other communication channels to reinforce

the message. For the role of redundancy in language, see my 1979 article.

PHONOLOGY, TYPOGRAPHY, AND PUNCTUATION

Information Units. Lexical and Syntactic Boundaries

All discourse is arranged by information units. While the normal unit of speech perception corresponds to a syntactic constituent, the speaker may extend the boundary of an information unit beyond a constituent. Thus an information unit can be more or less than a clause or any combination of these, for example, the whole of one clause and parts of another (Darian 1980:17). A change of speakers normally takes place at the end of sentences. The speaker is vulnerable to interruption at every sentence completion. One way to avoid this is to pause after a relational term (Because. Even though. In fact) instead of at the end of the sentence. For instance: "I really wanted to see him because... it had to be settled." Or finishing a sentence and the following sentence opener: "I didn't know what to say | Then || I thought of an answer." Writing provides a clear and nonarbitrary division between sentences, also between and within words; speech does not. In conversation, the juncture between sentences may resemble a comma more than a period /#/, i.e., there is shorter pause than indicated in writing by a period. Intonation contours may approximate 232 more than the implicit 231 of writing. For example:

~~I'm going~~ ~~Monday~~ ~~You want to come~~

Speech is more responsive to the semantic needs of the sender. We can pause as long as we like before or after a hard or especially important item, regardless of the construction. Written language for example prohibits a comma between a long noun phrase subject and its verb. Yet a break is often needed for semantic clarity, and is indicated by a pause in speech. Now and then you find the comma ("Preparing the children for the lesson to follow, came next."). Sometimes, juncture is less ambiguous in spoken language. Consider the following:

> When a person learns to speak his language
> assumes the quality of a personality fingerprint.

With the comma omitted, the reader might read learn to speak his language, while speech would pause after speak.

Spoken-written differences are even greater at the word level. The sound spectrograph often reveals no break at all between successive words in a sentence, for example /watəyəgɔnəduwəbawtit/-- What are you going to do about it? Occasionally we observe longer gaps within words than between words (Ruth Day, in Kavanagh 1969:129). Many common phrasal units are probably first perceived as single words in speech (in a minute, going to go, not at all). We can see this with young children, who often transpose a unit to another part of speech ("I want a lot a."), or with a common spelling error of basic writing students "I use to ask him." Robert Allen even suggests that the concept of the word as normally defined is primarily a unit of written English (1970:351).

This problem of segmentation accounts for the difficulty of even the best electrical engineers in building a speech recognizer

(a device that listens to speech and types out a phonetic transcription of what is said). Print readers, on the other hand, have been relatively easy to construct, due to the "segmentability" of the written message (Liberman , in Kavanagh 1968:122).

This difference emphasizes once again the challenge of transforming speech into print, especially when dealing with intonation and emotions. Written language attempts to reproduce these elements with punctuation and other typographic features. But Frank Smith suggests that most punctuation comes too late to indicate how a sentence should be read; that intonation is signalled by meaning, which provides the immediate clue to how a line would be articulated (1975:181).

We use a host of typographic marks in trying to express the emotional overtones of gesture and speech. All with limited effectiveness. Quotes for sarcasm. A surprisingly large repertoire for emphasis, including: exclamation point, italics/underlining, capitals, quotes, boldface type, and double question marks. While some typographic marks represent spoken features, other do not. For example, ? ! ; : . always do. Quotes, underlining, and commas sometimes; possessive (') and capitals (in sentence-initial position) never. Meanings established by gesture, rhythm, stress, timbre, and intensity--may be lost when the words are printed verbatim. And the only way to capture them is by recasting the visual sentence, sometimes by adding adverbs for emphasis or intensity.

Graphemes, Phonemes, and Syllables

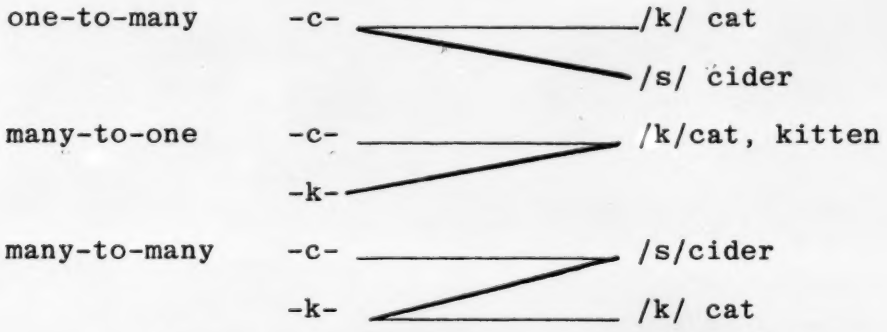
While speech influences writing, as indicated earlier, the opposite is equally true. Given the conservative tradition of the English writing system, we could hardly expect otherwise. Due partly to the establishment of printing in England, the writing system became fixed toward the end of the fifteenth century and has seen little change since then (Francis, in Levin and Williams 1970:43). The written tradition continues to be shaped largely by teachers and editors, who tend to reject the more daring and innovative language sometimes found in speech. Considering that modern literate communities learn a great deal of their vocabulary from reading, print will continue to exert its conservative--some would say salutary--influence over the spoken language.

We see this in dialect variation, a widespread feature of English speech. But accept for minor cross-national contrasts like color/colour or jail/goal, dialect differences in writing are minimal at best, and usually nonexistent, while spoken dialects may border on the mutually unintelligible (Gleason 1961:425). Here we have a case of people with strong dialect differences receiving the same syntactic and lexical input of printed forms. Another example is the pronunciation of newly-invented words, that are often given spelling pronunciations. Barker cites the case of megaton, a Greek-English hybrid (mega,Gk.,ton,English). At times people have mistaken the on for the Greek ending as in cyclotron and have rendered it /an/ instead of /ən/ (1964:68).

Comparable influences exist in other languges, in French, for instance, where the midvowels /é,è,œ́,œ̀,ò/ are unstable and by

themselves would probably coalesce into a three-vowel system. They are preserved by the force of orthography (Valdman 1966:472). Likewise, the past forms donna and repondit, that have disappeared from the spoken language but are learned in the classroom, to be used for writing. In Chinese, the dialects of Mandarin, Cantonese, etc., differ more than with English, while the written language is essentially the same (Lyons 1969:41).

In a system (English) containing 40 phonemes, with 26 letters (three of them redundant: f,q,x) used to represent them, there are bound to be problems of "fit." Many good studies are available on phoneme-grapheme correspondence and so no need here for a detailed analysis. Basically the relation of phoneme to grapheme is three-fold (Haas 1973:8):



Because of assimilation and contractions, an oral sentence almost always has fewer syllables than its written counterpart. There is conflicting evidence on syllable length in oral and written vocabulary. French's study of telephone conversations indicated more multisyllable words in speech (1930:306), while Drieman's later research turned up longer and more complex words in written samples (1962:41). Recent work has attributed considerable significance to the role of syllables, especially in learning to read. The syllable

as Harris Savin points out, is far more natural and easier to perceive than the phoneme, far more reliable as a way of sounding out the pronunciation of a word. This seems equally true for children and adults (in Kavanagh and Mattingly 1975: 321-323). While the phoneme is a psychological reality, segmentation experiments have shown that acoustically many phonemes cannot be recovered and that the minimal acoustical unit is closer to the syllable (Day, in Kavanagh and Mattingly 1968:126).

In one unusual study, children with reading problems were taught to read English represented by Chinese characters. The high success rate was attributed to the novelty of Chinese orthography but also to the fact that Chinese characters map into speech at the level of words rather than phonemes. The authors concluded that a great deal of reading disability is caused by the highly abstract nature of the phoneme, and that an intermediate unit such as the syllable might be more successful for introducing reading (Rozin 1971:1264-1268). In an unrelated paper, a Japanese physician k. Makita reports the incidence of dislexia in Japan as ten times lower than the United States. He attributes this to the closer sound-symbol correspondence in Japanese (1968:608), a basically syllabic language (with its two syllabic alphabets and the ideographic Chinese Kanji characters).

VOCABULARY

Type-token Differences

Children's reading, writing, speaking, and listening vocabularies--according to Spache--differ in breadth, depth, and fluency. In the

early stages, listening tends to be greatest, followed by speech, with reading and writing very small. This remains more-or-less constant until the sixth grade, when the reading vocabulary starts to predominate (Spache and Spache 1977:134).

For adults, spoken and written vocabularies differ in the kinds and frequency of words (type-token ratio). French's study found greater lexical variety in written English: In his speech sample 30 different words comprised half the total, while the written text required 69 (1930:305). Miller likewise found more variety in writing but to a lesser degree. He suggests that the 50 most common words account for about 60% of speech and 45% of writing (1951:89).

In the early stages--around age nine--children use fewer adjectives in writing than in speech. After that, more adjectives appear in writing. A comparison of several studies puts the ratio of adjectives as 1:78 higher in writing (Drieman 1962:53). The higher proportion of adjectives in writing emphasizes the earlier observation of written language as more ornamental. It also reiterates the distinction between nominal (written) and verbal (oral) styles. In this light, we find that speech contains more verbs and adverbs, writing, more adjectives and nouns (DeVito 1970:11).

Typography and Spelling. Homophones and Homographs

Prestige spellings such as programme or advisor offer a nuance available only to writing. They provide the writer a way of highlighting a word, of adding elegance.

Another unique written feature is abbreviations, which often show little phonetic resemblance to the words they represent, for example, e.g., for example; oz. for ounce; lb. for pound; i.e., for that is; Mrs., which is actually an abbreviation for Mistress.

Typographic marks tend to be ideographic: their lexical values established solely by convention, with no phonetic clues to their meaning or pronunciation; such items as the ampersand (&) or the dollar and cent signs. In their case even the word order is dominated by convention: Both are pronounced number first, though written in different sequence ($5, 5¢). Similarly, speech offers no guide to hyphenation: whether to write certain lexical units as a single word, as hyphenated, or as two separate words (co-operate/cooperate, well-worn/ well wrought). Sometimes the hyphen is used to prevent a misleading pronunciation (co-opt)(Quirk et al 1972:1057).

Homophones and Homographs--an endless source of word play--provide a near mirror-image of each other. Homophones (same sound, different meaning) are ambiguous only in speech; homographs (Same spelling, different meaning) may be unclear in both mediums. Because of context, topic, or structural clues, such words are rarely confusing, except with puns, where situations may be juxtaposed, or in one-liners, that lack the constraints of a surrounding discourse. Most of us have been in situations where an initial confusing utterance is quickly clarified by a following sentence, this for example, heard on a beach: "What happened to our sun/son?" Or "Your/You're back." It is interesting pedagogically to consider the semantic and syntactic changes needed in a sentence to eliminate the ambiguity of homophones:

1. It was her first knight.

2. It was her first night.

Sentence #1: It was the first time she had met a man in armor riding on a horse. Sentence #2: It was her first evening. In actual language use, sentences almost never appear in isolation.

INVENTORY OF FORMS

This inventory is designed for the scholar and the practitioner and as such will satisfy neither. It includes significant items common to writing but not to speech, or spoken forms seldom used in writing. It contrasts how the same function is often expressed by different words or structures, depending on the medium. I have omitted certain of the items discussed in the body of the text.

ABSOLUTE WORDS/ ALLNESS TERMS: Far more common in speech than writing (DeVito 1970:11). E.G.: never, everyone, always, completely, the same thing, at all, all the time. "You always worry about money." "I didn't say anything at all."

ADJECTIVES, COMPARISON OF: When the comparative of a one-syllable adjective takes both forms (quieter, more quiet) , the more + ADJ form is more common in writing, the -er form in speech.

CAN-MAY: May, expressing permission, is not common in speech. Can is the consultative (semi-formal) equivalent (Gleason 1965:359).

DEPENDENT CLAUSE: Less frequent in speech than writing. O'Donnell found that 56% of the T-units in speech had dependent clauses, 68% of T-units in writing. Overall, spoken units had 87% as many dependent clauses in speech as in writing (O'Donnell 1974:106).

SUBORDINATE CLAUSE (SCL)

1. Speech uses SCL in final position more often than writing does.

2. Conversely writing uses SCL in initial position more often than speech does.
3. However, SCL of cause is more common in speech (35% of dependent clause types) than writing (15%). Similarly, SCL of condition: in speech (14%), writing (5%)(Kroll, in Keenan 1977:102).
4. One-third more frequent in writing than in speech (Harrell 1957:34).
5. Last and perhaps most important, SCL is often spoken alone, with an accompanying independent clause.

RELATIVE CLAUSE (RCL)

1. Far less common in speech than writing.
2. Nonrestrictive RCL (The people in the audience, who paid five dollars a seat, expect a good show.) is very rare in speech. The fact that it appears at all is due to the influence of the written form (Gleason 1965:109).
3. The which of writing normally changes to that in speech or is deleted.

CONFIRMATIONS Only in speech. E.G.: right? all right? you know? ok? check? got it? good? A confirmation may be signalled by a rising (question-mark) intonation:

A: I have a ~~student~~ who's a ~~history major~~ ↗

B: Yea (=Yes, what about him?).

CONTRACTIONS Primary and secondary. Primary: word pairs that would be regarded as formal if not contracted (don't, isn't,

let's, it's, I'll, he's). Secondary: used with proper nouns ("Glenview'd be a good place to send him."). In "writing by ear," we would favor the primary over secondary contractions. A further consideration: whether the form improves the rhythm and emphasis of a sentence. The Wall Street Journal editorial policy is to make contractions of negative words, plus other optionals (Flesch 1974: 102,112).

COORDINATE CLAUSES: About one-third more common in speech than writing (Kroll, in Keenan 1977:87).

DEICTIC REFERENCE: Only in speech. Common in unplanned spoken narrative. "I spoke to this man." "These people were giving out candy " (a marginal form).

DOWN-TONERS: Words that have a "lowering" or moderating effect on the verb. Quirk & Co. (L972:453) list four kinds: Compromisers, diminishers, minimizers, and approximators. Compromisers such as kind of and sort of are restricted to conversation. "Something sort of amazes me."

ELLIPTICAL SENTENCES: Far more common in speech. A very effective way of achieving conversational tone in writing.

FREE MODIFIERS: Clauses or phrases--SCL, RCL, verbal phrase(-ing, -en, infinitive), noun phrase, absolute--joined to a main clause by nonterminal punctuation. Examples:

Cultures die, succumbing to the illusion of tradition.
stifled by the inability to change.
to be replaced by new forms.
victims of their inability to change.
their growth blocked by hardening of the institutions.

Such forms, especially in sentence-final position, are rare in speech.

FRONTED TOPIC: Common in speech. Seldom used in writing.

EMPHATIC TOPIC. In informal conversation, it is quite common for a speaker to front an element (especially a complement) and give it primary stress (thus doubling the emphasis): "Relaxation you call it!"

CONTRASTIVE TOPIC. Fronting points dramatically to the contrast between two things mentioned in a sentence or clause. "Rich he may be but he's not happy." (Leech and Svartik 1975:176).

IMPERSONALIZATION: Characteristic of writing and formal speech. The personal spoken I, You, or They becomes the semi-formal We, the formal One, passive, or the frozen third person form the author, the writer (referring to oneself). The impersonal third person, common in writing, would be considered pompous, even bizarre in speech("Recently the author of this book was asked to conduct a workshop for... She was told that students were having a great deal of difficulty...").

Contrast the following pairs of sentence:

1. I/You had the feeling he was hiding something.
   One had the feeling he was hiding something.
2. They've banned fishing in Hawk Lake.
   Fishing has been banned in Hawk Lake.

INVERTED CONSTRUCTIONS: Almost exclusively written. Their use in speech adds a very formal flavor.

PREPOSITION IN CLAUSE- AND SENTENCE-FINAL POSITION

A perennial bagaboo to students of style. This usage is the rule in speech, while writing often undergoes the most tortured constructions to avoid it. Relocating a sentence-final preposition--if it fits there--often weakens the force and vivacity of a sentence, often creating a linguistic monstrosity which is harder to understand. E.G.: "The study of sentences out of context is the study of oddities at which we have trained ourselves not to boggle." Or: "Once a passage is selected that is representative of a book upon which the student is to be tested," For clause-final: "...the nature of the linguistic input to which language learners are exposed." Professional writers very often use prepositions in sentence-final. In some cases, there is no other choice. For excellent examples, see Bryant (1962:163).

OTHER CONSTRUCTIONS. Chiefly written: "Already working on the Chicago convention are Don Freeman..." "Additives, said Dr. Levin, have increased greatly in our diet."

MODIFIERS. PRE-MODIFIERS: Long pre-modifiers are more common in writing than in speech. E.G.: "The long dark seemingly endless corridor called inflation..."

MUCH: Far more common in writing. E.G.: "People have much difficulty..." Speech tends to use a lot of or a great deal of.

MUST: A largely written form. Speech uses have to.

PASSIVE: Less common in speech than writing. O'Donnell found 14 passives per 100 T-units of speech, 29 in writing (1974:108).

PAUSE WORDS: Speech only. A filler or repetition of a word/phrase/clause while thinking of the idea to follow: like, uh, I mean, you know. E.G.: "He got his fingers caught in Mrs. Smith's, uh, Mrs. Smith's ...castenettes." Or: "It's a...what do you call it...a marsupial."

OF (POSSESSIVE): More formal than NOUN + NOUN construction, and as such more of a written form. E.G.: "The object of the writer/the writer's object..."

PRONOUNS (NON-SEXIST FORMS): S/he (for she or he), his/her. A stylistic infelicity of the highest order. This is bucking the tide, but as a student of style, I must offer an opinion. This pronoun splice is clumsy in writing and even clumsier in speech, leading to such offshoots as personpower needs, handyperson, etc. The French of course use On. To retain the admirable intent of dual pronouns, we have available a few words such as one, you, and even they.

REDUCTION: Speech often reduces clause to phrase, phrase to word. Reduction eliminates unnecessary words and improves clarity of the message. E.G.: "They will probably add new dimensions to that which/what(sp) is already known." Consider the following rewrites:

1. Sentences in which the oral intonation patterns are clear and easy to read(wr)→sentences with

clear and easy-to-read oral intonation patterns...

2. Since the language which is being taught is the spoken language---Since the language (being) taught...

QUESTIONS, RHETORICAL: Common in speech, especially in classroom lectures.

REFERENT AND PROPOSITION: Only in speech. A clause or phrase (with noun or pronoun), separated by pause from a following clause or phrase that clarifies, explains, or completes it. E.G.: "He's so pleasant, Mr. Roberts." (He = Mr.Roberts). Or "Let me have it(± pointing), the salt." The initial proposition often serves to introduce the general topic, preparing the listener for what is coming. Another example: "My father, he didn't want to leave." In writing, this might be rendered: "As for my father, he didn't want to leave."

RELATIONAL CATEGORIES: Semantic categories--such as time, frequency, cause, contrast--that relate sentences to each other (or sometimes relate clause and phrase within a sentence). They may be marked or unmarked. As we have seen, speech and writing often select different forms for comparable meanings, with certain overlap. The following are simply illustrative:

ADDITION

sp: then, and, after that, besides

wr: moreover, in addition, furthermore

CONCLUDERS/SUMMARIZERS

sp: Well, anyway..., in short, to make a long story short

wr: in conclusion

CONTRAST

sp: at the same time, but, quite the contrary, still, even so/though

wr: however, nevertheless, despite, yet, nonetheless

REFERENCE

sp: about, on, as for

wr: with regard to, concerning, with reference to . "The teacher asked students to prepare a report concerning/ on people of different social classes."

RESULT

sp: so, as a result, for that reason

wr: therefore, accordingly, consequently, thus

REPETITION: VERBATIM. Usually spoken. For emphasis or intensity. May represent a heightened emotional state. Especially common with children: "I don't want to. I almost fell. I almost fell."

RESTATEMENT. In speech and writing, but especially in speech. E.G.: "There are a tremendous number of written stimuli people are bombarded with every day, a tremendous number of sources. These sources use a broad range, a wide variety of language." Or "There were these people talkin' and this woman this lady was describin' somethin' (Keenan 1977:25).

REVIEWERS: Basically a spoken function: Don't forget, Keep in mind. "Remember, the first space is for the ID number."

SENTENCE-LENGTH: The sentence--as traditionally defined--is longer in writing, though as we have seen, terminal punctuation (.) in a written sentence may become nonterminal in speech. O'Donnell's T-units averaged 18 words in speech, 25 in writing.

SENTENCE OPENERS: Word/phrase/clause found at the beginning of a sentence before the basic sentence pattern. Informal conversation favors coordinate conjunctions (and, so, but); writing, more subordinators and other relational terms. Verbal phrases (with present- and past-participles) are rare in speech, characteristic of writing: "Being a farmer, he had to get up early." Or "Cleared, the site would be very valuable" (Leech and Svartik 1975:161).

SUBJECT-VERB DISTANCE: Due to the presence in writing of intervening modification, subject and verb distance tends to be closer in speech. A writer's rule: the further apart the subject and verb, the greater potential for confusing the message.

SUBORDINATION In oral discourse, students tend to use less subordination than in writing about the same topic (Krashen 1978:174).

PARENTHETICALS: Word/phrase/clause used within a sentence and separated by pause or punctuation. In speech they are signalled only by lower tone, while writing has greater resources: (1) parentheses (...), (2) pairs of commas (,...,), and (3) pairs of dashes (--...--):

"The man you were asking about--the one who smokes the pipe--he works in the accounting office."

THAT (AS SUBORDINATE ADVERB, RELATIVE PRONOUN: Normally retained in formal writing. Usually omitted in informal conversation, where possible. E.G.: "I was hoping (that) they'd come." "It happened so quickly (that) no one noticed it." "It's possible (that) others knew of it as well." See Bryant's excellent discussion (1962: 208-209).

GLOSSARY

ANACOLUTHON: A false start. The spoken feature of starting a new construction before finishing the old one.

COHESION: The linking of sentences or thought units by overt lexical markers (However, He, The other one).

COHERENCE: The relation of utterances through the situation, rather than specific linking words.

COLLOCATION: The appropriateness of semantic relations between words in a phrase; how words go together (a herd of turtles? No.).

COMMUNICATION CHANNELS: Complementary ways of transmitting information, including: pictures, presupposition, linguistic/vocal, situation/context, and gesture.

CONSTITUENT: A segment of an utterance containing meaning. The largest syntactic constituent is a sentence, the smallest a morpheme, with smaller clause and phrase "cuts" in between.

GRAPHEMES: Letters.

INFORMATION UNIT: A unit of meaning, often marked by a pause.

MONOLOG: Spontaneous spoken language, used in situations where others may be present but are not meant to join in.

NOMINAL STYLE: A language style that emphasizes noun phrases and nominal forms for expressing ideas. Characteristic of writing.

PLANNED DISCOURSE: Discourse organized in advance, completely written out. It may be read aloud but would still retain its written flavor.

PRESUPPOSITION: Information we assume on the reader's or listeners part. The audience's background.

REDUNDANCY: Information whose meaning may be predicted or limited by other information in the discourse.

REGISTER: Levels of formality in discourse.

RELATIONAL TERMS: Words/phrases that express a semantic relationship and join sentences, clauses, or phrases (Then, However, In general).

SEGMENTATION: Separation of linguistic units. This study refers to the specific separation of phonemes by the sound spectrograph.

SIDETRACKING: A common speech practice of digressing from the main point, then either dropping it or not returning to it for a long time.

SENTENCE CONNECTORS: Relational terms used to join sentences.

SPOKEN PROSE: A formal speech or lecture, written out in advance, and read aloud or memorized.

T-UNIT: A main clause and all its modifiers.

TYPE-TOKEN RATIO: Relation between kinds of words in a corpus and their frequency of occurrence.

UNPLANNED DISCOURSE: Discourse that has not been previously thought out or organized.

VERBAL STYLE: A language style using verbal phrases for expressing ideas. Characteristic of speech.

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